

- 36 -

PHOSPHOPROTEIN BINDING AGENTS AND METHODS OF THEIR USE**Abstract of the Invention**

The invention provides reagents and methods for characterizing (i.e.,
5 identification and/or quantitation) the phosphorylation states of proteins.
Proteins may be post-transcriptionally modified such that they contain phosphate
groups at either some or all of their serine, threonine, tyrosine, histidine, and/or
lysine amino acid residues. In many cases the extent to which a protein is
phosphorylated determines its bioactivity, i.e., its ability to effect cell functions
10 such as differentiation, division, and metabolism. Hence, a powerful tool for
diagnosing various diseases and for furthering the understanding of protein-
protein interactions is provided.

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